CLAIMS

1. A system for reducing perceived latency in servicing user requests for unsolicited information made from remote devices, the system comprising a computer that is coupled to a transmitter and to a hypermedia server, wherein the computer comprises first storage and executes a first program that causes the computer to

(a) receive from the hypermedia server the unsolicited information and an identification of an intended recipient of the unsolicited information, wherein the unsolicited information is received according to a first transmission protocol in a first form, and

(b) in response to the receipt of the unsolicited information and recipient identification, to cause the computer:

(1) to generate a plurality of message entities that convey at least a portion of the contents of the unsolicited information in a second form that differs from the first form,

(2) to send the message entities via the transmitter according to a second transmission protocol that differs from the first transmission protocol so as to be received by a respective remote device associated with the intended recipient, wherein the second transmission protocol is optimized for use with a wireless device, and

(3) to send a notification via the transmitter so as to be received by the respective remote device, wherein the notification indicates the plurality of message entities have been sent to the respective remote device.

2. A system according to claim 1 wherein the message entities in the second form preserve the order of the unsolicited information in the first form.

3. A system according to claim 1 wherein the first transmission protocol conforms to a hypertext transfer protocol and the second transmission protocol conforms to a handheld device transfter protocol.

4. A system according to claim 1 wherein the first form conforms to a first (hypertext) markup language specification and the second form conforms to a second (handheld device) markup language.

5. 5. A system according to claim 1 wherein the first program causes the computer to:

determine type of content conveyed by the message entities,

check whether the type of content is acceptable to the respective remote device, and

if not acceptable, convert the content into another type before sending it to the
10 respective remote device.

6. A system for reducing perceived latency in servicing user requests for unsolicited information made from remote devices, the system comprising a computer that is coupled to a transmitter and to a hypermedia server, wherein the computer comprises first storage and
15 executes a first program that causes the computer to

(a) receive from the hypermedia server the unsolicited information and an identification of an intended recipient of the unsolicited information, and

(b) in response to the receipt of the unsolicited information and recipient identification, to cause the computer:

20 (1) to generate a plurality of message entities that convey at least a portion of the contents of the unsolicited information, wherein the plurality of message entities are represented by one or more cards arranged in a deck of information, at least one of the cards conveying a link to another deck or to a resource available by way of the hypermedia server,

25 (2) to send the deck via the transmitter so as to be received by a respective remote device associated with the intended recipient, and

(3) to send a notification via the transmitter so as to be received by the respective remote device, wherein the notification indicates the plurality of message entities have been sent to the respective remote device.

30

7. A system according to claim 6 wherein each of the cards has a respective type within a set of types including a type that is to be displayed by the respective remote device, a type that is not to be displayed, a type that offers a choice to a user, and a type that allows a user to enter information.

8. A system according to claim 6 wherein a respective card includes access control information that indicates whether information conveyed in the respective card has access restricted to specific decks.

9. A system according to claim 6 wherein the deck has a unique identifier in the form of a Uniform Resource Locator (URL).

10. A system according to claim 6 wherein the notification includes a link to a service in any of the remote device, the computer or the hypermedia server that, when invoked, acts on the notification.

11. A system for reducing perceived latency in servicing user requests for unsolicited information made from remote devices, the system comprising a computer that is coupled to a transmitter and to a hypermedia server, wherein the computer comprises first storage and executes a first program that causes the computer to

(a) receive from the hypermedia server the unsolicited information and an identification of an intended recipient of the unsolicited information,

(b) in response to the receipt of the unsolicited information and recipient identification, to cause the computer:

(1) to generate a plurality of message entities that convey at least a portion of the contents of the unsolicited information,

(2) to send the message entities via the transmitter so as to be received by a respective remote device associated with the intended recipient, and

(3) to send a notification via the transmitter so as to be received by the respective remote device, wherein the notification indicates the plurality of message entities have been sent to the respective remote device,

(c) establish a communication session with the respective remote device, wherein a set of session parameters are established that is unique to the communication session,

(d) receive a request for services from the respective remote device during the communication session, wherein the request includes a set of request parameters that is unique to the request, and

(e) build a get-request to send to the hypermedia server, whrerein the get-request includes one or more parameters from each of the set of session parameters and the set of request parameters.

12. A system according to claim 11 wherein the first program causes the computer to:

detect a conflict between a parameter in the set of session parameters and a parameter in the set of request parameters, and

include a parameter in the get request that represents a resolution of the conflict in favor of the parameter in the set of request parameters.

13. A system according to claim 11 wherein the first program causes the computer to establish a set of common parameters that are shared by multiple users and sessions.

14. A system according to claim 13 wherein the first program causes the computer to:

detect a conflict in respective parameters in the set of common parameters, the set of session parameters and the set of request parameters, and

include a parameter in the get request that represents a resolution of the conflict in favor of the parameter in the set of request parameters first, the parameter in the set of ssession parameters second, and the parameter in the set of common parameters last.

15. A system according to claim 1, 6 or 11 that further comprises the respective remote device, wherein the respective remote device is remotely located with respect to the computer and comprises a display, a receiver and second storage, and executes a second program that causes the respective remote device

to receive via the receiver the plurality of message entities and, in response thereto, to store in the second storage one or more first records representing contents of the message entities, and

to receive via the receiver the notification and, in response thereto, to present an alert notifying the intended recipient that the first records are stored in the second storage.

16. A system according to claim 15 wherein the respective remote device is a wireless telephone.

17. A system according to claim 15 wherein the respective remote device is a handheld device.

18. A system according to claim 15 wherein the second program causes the remote device

to store the notification in persistent storage, and

to display a list of notifications that have been received by the remote device.

19. A system according to claim 18 wherein the second program causes the remote device to display an indication of which notifications in the list have been acted upon by an operator of the remote device.

20. A system according to claim 18 wherein the second program causes the remote device to determine whether a received notification is a duplicate of another notification already stored.

21. A device for use in a system for reducing perceived latency in servicing one or more user requests for unsolicited information made from the device, wherein the device is remotely located with respect to a computer and communicates with the computer, and wherein the device comprises a receiver, display, input device, storage and processor executing a program that provides:

communication facilities that receive information by the receiver from the computer,

interface facilities that present information by the display and receive input by the input device, and

navigation facilities that traverse Uniform Resource Locator (URL) links;

and wherein:

the communication facilities receive a plurality of message entities representing the unsolicited information and, in response thereto, the storage records the message entities,

the communication facilities receive a notification and, in response thereto, the interface facilities present a notification that the message entities are recorded in the storage, and

the interface facilities receive a user request and, in response thereto, present the unsolicited information, wherein the unsolicited information is obtained for presentation by the navigation facilities traversing a URL link conveyed by a message entity.

22. A device according to claim 21 wherein the navigation facility traverses the URL link to obtain unsolicited information from the storage.

23. A device according to claim 21 wherein the navigation facility traverses the URL link to obtain unsolicited information from the computer.

24. A device according to claim 21 wherein the message entities are represented by one or more cards arranged in a deck of information, at least one of the cards conveying a link to another deck or to a resource available by way of the computer.

25. A device according to claim 24 wherein each of the cards has a respective type within a set of types including a type that is to be presented by the display, a type that is not to be presented, and a type that allows entry of information through the input device.

26. A device according to claim 24 wherein a respective card includes access control information that indicates whether information conveyed in the respective card has access restricted to specific decks.

27. A device according to claim 24 wherein the deck has a unique identifier in the form of a Uniform Resource Locator (URL).

28. A device according to claim 24 wherein the notification includes a link to a service provided by the device or the computer that, when invoked, acts on the notification.

29. A device according to claim 21 that is a wireless telephone.

30. A device according to claim 21 that is a handheld device.

31. A device according to claim 21 that comprises persistent storage, wherein the program causes the device:
    to store the notification in persistent storage, and
    to present a list of notifications that have been received by the device.

32. A device according to claim 31 that presents an indication of which notifications in the list have been acted upon by a user.

33. A device according to claim 31 wherein the program causes the device to determine whether a received notification is a duplicate of another notification already stored in persistent storage and to delete from persistent storage one of the duplicate notifications.